

### Abstract

A method is provided for encoding  $K > 1$  sequentially presented video pictures. Each of the  $K$  pictures is divided into an  $m > 1$  row  $\times$   $n > 1$  column array of non-overlapping coding units of equal sizes. Each coding unit occupies a respective coding unit position in the picture from which it was divided. An arbitrary, pseudo random pattern of coding units is selected for refreshing during each of the  $K$  pictures. Each pattern selected during any given one of the  $K$  pictures includes a sequence of one or more coding units of the array. In addition, the pixels of each coding unit selected for refreshing during a  $k^{\text{th}}$  picture occupy different pixel positions than each coding unit selected for refreshing during a preceding one of the  $1^{\text{st}}$  to  $(k-1)^{\text{th}}$  pictures of the  $K$  pictures. Furthermore, each pixel position of a moving picture image formed from the  $K$  pictures is selected for refreshing once over the sequence of  $K$  pictures.

A system for encoding includes a source of the  $K$  pictures and an intra/inter decision circuit for selecting the coding units for refreshing over the sequence of  $K$  frames. The method or system produces an encoded signal which can be stored on a storage medium. A method and system for decoding the encoded signal is also provided.